



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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TDD 401-831-5508

November 6, 2001

James Shafer, Remedial Project Manager  
U.S. Department of the Navy  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway  
Code 1823-Mail Stop 82  
Lester, PA 19113-2090

RE: Draft Final Derecktor Shipyard Building, Project Close-Out Report for Various Removal Actions, Naval Station Newport, Newport, Rhode Island

Dear Mr. Shafer,

The Rhode Island Department of Environmental Management, Office of Waste Management, has reviewed the Close-Out Report for the Derecktor Shipyard sites. dated 3 October 2001. Attached are comments generated as a result of this review.

The Office of Waste Management understands that additional work remains to be done at the site, such as, the investigation and possible remediation of the former gas station. Therefore, the Office of Waste Management will consider this report to be a documentation of the activities performed to date. If the Navy has any questions or requires additional information please call this Office at (401) 222-2797 ext.7111.

Sincerely,

*Paul Kulpa*  
Paul Kulpa,

cc: Richard Gottlieb, DEM OWM  
Kymberlee Keckler, USEPA  
Melissa Griffin, NSN.

derwpremovals

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**Draft Final Derecktor Shipyard Building,  
Project Close Out Report  
For Various Removal Actions,**

**4. Section B, Building 42 S 42, Sump Pit Removal;  
Page 15, Soil and Concrete Removal.**

“the ground surface was observed as consisting of a dense graded aggregate. Whether or not this soil supported water infiltration was not determined.... Soil was removed with a pick ax....”

The report states that the soil consisted of a dense aggregate that required removal via a pick ax. In addition it was reported a depression was not present immediate beneath the sump and that the area was relatively flat. Both of these conditions would have supported lateral movement of contaminants. Please indicate what were taken to determine the lateral extent of contamination prior to the removal actions. That is were headspace samples collected in the area prior to removal, was the area examined for preferential flow pathways, etc.

*Evaluation of Navy's Response*

*The Navy has stated that the approved Work Plan did not require addressing whether lateral migration had occurred, hence this operation was not performed. Work Plans are general documents, which by their nature could not address every contingency. The Navy report notes that the area is relatively flat, (as opposed of being a depression) and composed of a dense aggregate. This condition was not known prior to the removal action, (the base of the sump was within inches of the ground surface thus prohibiting any assessment of ground contours or the nature of the material). Therefore, when the true conditions of the site was determined after the sump had been removed, the Navy should have adjusted the effort to evaluate possible lateral movement and sampled accordingly.*

**8. Section C, Test Pit 14/ PCB Contaminated Soil Removal;  
Page 21, Field Investigation**

This section of the report describes the collection of additional surface soil, subsurface soil, sediment, and concrete samples. However, a map depicting the locations of these samples was not provided. Please include a copy of the map in the report.

*Evaluation of Navy's Response*

*The Navy has included a figure with sampling locations labeled TP 14..., Sed-1.98..., stone*

S-2 98..., 03-98-01..., etc. The figure should include a legend defining these different sample locations.

**11. Section C, Test Pit 14/ PCB Contaminated Soil Removal;  
Page 22, Expanded Investigation**

The report notes that additional excavations were carried out in the Test Pit 14 area and under the loading dock. The previous investigations revealed exceedances in soils in the catch basin. The report should note whether these soils were removed. In addition, the report should note whether the catch basin functioned as a UIC, (that is had a hard or soft bottom and sides).

*Evaluation of Navy's Response*

*The Navy notes that since no PCBs were found in the catch basin a determination as to whether the catch basin functioned as a UIC was not performed. The State requested that the Navy determine whether any of the catch basin in the study area functioned as a UIC. Further the catch basin in question exceeded the State's requirements for TPH and benzo (b) fluoranthene. The fact that the catch basin did not exceed the regulatory standard for PCBs did not relieve the Navy of its requirement to determine whether the catch basin was a UIC or address the exceedances for TPH and SVOC*

**14a Section C, Test Pit 14/ PCB Contaminated Soil Removal;  
Page 2, Expanded Investigation**

To deepen the existing excavation, soils were removed from the areas that are currently 2 feet (bgs). .. The excavation continues south from the current location approximately 29 feet.....

This paragraph deals with the removal of soils from the sloped or embankment area. Although not clearly stated it is assumed that the additional removal actions also included deepening the excavation in the corner of Building 6. Please confirm and modify the report accordingly.

**14b Section C, Test Pit 14/ PCB Contaminated Soil Removal;  
Page 21, Expanded Investigation**

The remedial action at this site was done in series in which soils were removed, confirmatory samples were collected and then additional soils were removed. As a result the depth of the removals varied across the site. On figures 5,6,7 and 8 please depict the approximate depth of the removal actions. In addition, please note the depth of the sidewalls samples in the figure, and discuss the rationale for the depth of these samples in the text.

15. **Section C, Test Pit 14/ PCB Contaminated Soil Removal;  
Page 24, Expanded Investigation**

The report notes that confirmatory samples were collected from the base and the sidewalls of the expanded excavation area. A review of the information presented indicates that the confirmatory samples were not collected so as to provide adequate coverage of the areas of concern, (additional samples should have been collected and/or the samples were not properly analyzed along the northern, southern and western sidewalls). Accordingly, it has not been demonstrated that compliance has been reached in these areas and additional work is required to show that the remedial objectives have been obtained.

*Evaluation of Response*

*This evaluation applies to issues raised in comments 13, 14 and 15.*

*The Office of Waste Management has questioned the final confirmatory sampling effort. In that, additional samples should have been collected and/or the samples were not properly analyzed along sidewalls. Based upon the information presented it appears that the Navy relied upon the field PCB analytical results to both guide and curtail the final laboratory confirmatory sampling effort. In that areas which did not contain elevated levels of PCBs were not sampled. This strategy would be valid if PCBs were the only contaminant at the site or if remediation to the PCB standard would result in the other contaminants being addressed.*

*The analytical results show that this site did not meet either criterion. In addition to PCBs, metals, SVOC and TPH was detected in site samples above regulatory levels. Further levels of TPH, SVOC or metals above regulatory standards were found at locations, which did not exceed the regulatory standard for PCBs. As an illustration, during the second excavation six sample locations exceed regulatory standards. All six of the locations exceed the standards for TPH and SVOCs, only three of the locations exceeded the standard for PCBs.*

*Therefore, it has not been demonstrated that compliance has been reached in the embankment area.*

*Similarly compliance has not been demonstrated in the removal action conducted at the corner of Building 6. The report notes that exceedances of regulatory requirements were found on the sidewalls and base after the initial removal action. The second action in this area was limited to deepen the excavation, additional soil was not removed from the sidewalls. Finally, after the second removal action a single confirmatory sample was collected from the base. No confirmatory samples were collected from the sidewalls.*

**16. Section D, Building-42S42-5 Sump Pit Investigation and Remediation  
Confirmatory Sampling,  
Page 31.**

In a previous comment package the following concern was raised, "The report states that jar headspace readings and Petro flag samples were collected along the pipeline and the results are presented in Table 1. There is no clear correlation between the jar headspace readings and the Petro Flag results, in that a high jar head space sample may have a low Petro flag result and vice a versa. The report should include a discussion explaining these observations (that is whether elevated levels of other contaminants were observed at locations with high jar head space but low Petro Flag results, was there any naturally occurring compounds which would generate high head space readings, etc)."

Rather than address the comment the Navy has eliminated the reference table and the discussion of the Petro Flag and headspace results from the report. Field observations and field tests are important elements of investigations and remedial actions. Petro Flag test kits have been used in the collection of confirmatory samples, and as such should not be considered as indicator tests. Therefore, the report should address the discrepancies between the field data.

*Evaluation of Navy's Response*

*The Navy has listed the known interference, which may affect the Petro Flag results. Listed interference include sampling under certain type of trees, sampling near roots, high natural organic matter, temperature, soil type and moisture content. As Petroflag results may be affected by the above interferences the normal procedure is note if any of these interferences are present in the individual site samples. Please indicate which potential interference was present in the individual site samples. In addition, the report should indicate the magnitude associated with these interferences, (that is temperature interferences might result in a change of 0-5 percent in the final reported concentration).*

**29. Section I, Observation Arsenic  
Page 41.**

This section of the report implies that the elevated levels of arsenic found at the site are a result of naturally occurring arsenic that is abundant in Rhode Island. The natural levels of arsenic in this state are low. Further a background study has not been performed at this site. Finally, the concentrations of arsenic observed at the Derecktor Shipyard site was greater than that found in background studies performed for other sties on the base. In light of the above it is inappropriate to imply that the observed concentrations are related to naturally occurring levels of arsenic and these statements should be removed from the report. Instead, this section of the report should simply note that a background study would have to be

performed in order to determine whether the observed levels are natural. If the Navy wishes the report may note that the concentrations observed at the site were greater than that determined to be background in other studies performed on the base.